

LCD MONITORS

INTRODUCTION

Of all the components that make up a PC, it could be argued that the monitor is the most important, as it's the main way in which you interact with your computer. A poor display can make even the most straightforward task feel like a chore, while a top-quality one can have the opposite effect, increasing your productivity. Fortunately, good monitors are getting cheaper all the time, and even large 22in models are available for less than £200.

This month we've tested 18 of the latest LCD monitors, from inexpensive 19in models for everyday tasks and 20in specialist professional graphics monitors, right up to 22in and 24in models that provide acres of desktop space and are ideal for multitasking and entertainment. Many of them have AV inputs for hooking up consoles and DVD players, while some have USB hubs and adjustable stands to give you the most convenient working environment possible.

Whatever your needs, you're sure to find the ideal display in this *Labs*.

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CRYSTAL CLEAR

A new LCD monitor improves your working environment and can transform your PC into a high-definition media centre. We test 18 LCD monitors to see which really shine

Choosing an... LCD Monitor

With a baffling number of monitor manufacturers, models and sizes to choose from, it can be difficult to know exactly what to look for in a display, particularly as complicated technical specifications are often bandied about on adverts and websites without any explanation of which are really important. In this guide we'll explain the key features to look for to ensure that you end up spending a sensible amount of money on the monitor that best suits your day-to-day needs.

SIZE MATTERS

Your first task is to decide just how much desktop space you need from your new LCD. We've divided the displays here into five size categories. As most monitors are now widescreen, we've looked at 19in, 20in, 22in and 24in widescreen models. However, 4:3-aspect monitors are still used in a few areas, such as professional artwork creation and design, so we've also included a pair of 20in models.

To pick a screen of the appropriate size, you need to consider exactly what you want to use it for – whether it's office work and web browsing, gaming and video, or a mixture of tasks. For many people, a basic 19in monitor will more than suffice, and they're

available at increasingly affordable prices. If you would like to do a little more with your desktop, however, you should consider some of the larger displays. The extra inch of a 20in monitor can make quite a difference, but it's the step up to 22in and 24in models that really increases your display's versatility. The former will lift your resolution from 1,440x900 to a more useful 1,680x1,050, while the latter's 1,920x1,200 will give you a huge amount of desktop space and let you display 1080p high-definition video.

HD VIDEO

If you want to play any protected high-definition content, such as movies on Blu-ray discs, your monitor will have to comply with the High Definition Content Protection (HDCP) standard. This anti-piracy feature is built into most newer models, such as Samsung's SyncMaster 245T, but it can only be carried digitally.

HDMI ports are fine, as are most recent DVI connections, but if you buy a monitor with only an analogue VGA connection you'll never be able to watch commercial high-definition films on it. What's more, when a monitor is plugged in over VGA there are more settings to tweak than when using DVI or HDMI, so they can be harder to set up.



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How we test LCD monitors

Before testing, we calibrate each monitor to ensure that it produces the best possible picture. We then use a specialised video splitter to send the same source signal to all the monitors in each size category at once, which allows us to spot even the subtlest differences between them.

First we display a series of test photos, selected for their high contrast scenes, skin tones and recognisable environments, to check colour accuracy. We then use solid

colour blocks to check for even illumination and to reveal any dead or stuck pixels. Our colour wheel tests show up any unusual colour casts such as a blue tinge, while our greyscale transition test is essentially a colour ramp from black to white. It shows a smooth blend through the greys when reproduced correctly, but noticeable banding on poor monitors.

Finally, we run a selection of game and video samples to check for problems with smearing or sluggish pixel response.

As well as HDMI ports, some of the more expensive monitors on test this month provide connections such as component, S-video and composite video, which means you can connect consumer devices such as games consoles and DVD players to your display.

QUALITY CONTROL

Many factors play a part in what makes a top-quality display. The maximum brightness figure is self-explanatory, while the contrast ratio denotes the difference between the blackest black and the whitest white that a screen can display. A high contrast level can add vibrancy to colours and reveal detail in light and dark areas. As usual the figures don't tell the whole story, so

we have included details on the quality of each screen in our reviews.

EXTRA VALUE

Image quality is vital, but many of these LCDs cram in a few extras for your money. Integrated speakers will never rival a dedicated set but can be useful for internet video clips and webcam conversations; 10 of the 18 models have speakers of varying quality. Some also have USB2 hubs for connecting thumb drives and peripherals such as mice. This can be a real time-saver if your PC is tucked under a desk or has no front-mounted ports. Samsung's SyncMaster 245T even comes with a colour calibration tool for getting the most accurate picture possible.

19in WIDESCREEN/20in 4:3 LCD MONITORS

HANNSG HW194D

★★★★

£120 inc VAT
From www.morecomputers.com



Not only is HannsG's HW194D the cheapest monitor here, it's also the only 19in model with a fully adjustable stand. As well as swivelling and tilting, it lifts through nearly 12cm and pivots 90°, making it easy to find an optimal viewing position.

It has a very bright 1,440x900 screen, but we noticed a few image quality weaknesses. Our gradient tests exhibited minor banding instead of smooth transitions between shades. More significant was the display's slight blue tinge. No matter how much we fiddled with the settings, we couldn't get rid of it. The unresponsive side-mounted buttons and unintuitive menu system also made tweaking the monitor's settings difficult.

HannsG's HW194D is an inexpensive monitor with fair image quality and a useful adjustable stand. Its image quality is comparable to that of the 19in Philips screen, but both monitors suffer in comparison with LG's L204WS, which is worth the extra few pounds for its 20in screen.

19in WIDESCREEN LCD 1,440x900 native resolution, VGA, DVI inputs, 3.5mm line-in audio input
PART CODE HW194D DETAILS www.hannsg.co.uk

- ✓ Low price; versatile stand
- ✗ Blue tinge to images

BELINEA o.display 1_19" wide

★★★

£126 inc VAT
From www.oyyy.co.uk



Belinea's new monitor range looks odd with its off-white bezel and orange inscriptions. Rather than aping the clean white design of Apple's monitors, it actually looks a little dirty, and the square base doesn't help its appearance.

It has only an analogue VGA input, and the image needed tweaking. Sadly, the controls are awkwardly placed on the right edge of the frame, and the unresponsive buttons and poor menus make it tricky to adjust.

The o.display has a high brightness rating of 400cd/m² and its screen is evenly illuminated, but even the best picture we could get had a bluish tinge. Viewing angles are poor, and if you move slightly up or down from the optimal eye level everything turns violet. We also saw a small amount of banding in our greyscale gradient tests.

Belinea's monitor is inexpensive, but it's not great value when you can get HannsG's superior HW194D for less and LG's larger L204WS for just a little more.

19in WIDESCREEN LCD 1,440x900 native resolution, VGA input, 3.5mm line-in audio input
PART CODE O.DISPLAY1.1_19 DETAILS www.belinea.com

- ✓ Low price; bright backlight
- ✗ Poor viewing angles; blue tinge to images

PHILIPS 190CW8FB

★★★★

£137 inc VAT
From www.ebuyer.com



Philips' 190CW8FB has only an analogue VGA input, and we needed to tweak the image settings once we'd set it up. The poor onscreen menu doesn't help matters, but the buttons are clearly labelled and positioned on the front of the sleek, if flimsy, black bezel. The monitor comes with the SmartAccessory pack, which consists of a set of clips that attach to the side of the monitor to hold pens and webcams.

Our best tweaking couldn't eliminate a reddish hue, which was most noticeable in our greyscale tests. It was less obvious in photos and video, though, so you shouldn't notice it in everyday use. Viewing angles are good enough for several people to watch the screen at once.

Colours were a little washed out, but overall this monitor's image quality is above average. The problem is the quality of the competition. HannsG's HW194D offers similar quality for less cash, and you can even buy LG's 20in model, with its superior image quality and 1,680x1,050 resolution, for less. By comparison, Philips' screen seems poor value.

19in WIDESCREEN LCD 1,440x900 native resolution, VGA input, one-port USB2 hub, SmartAccessory pack
PART CODE 190CW8FB/05 DETAILS www.philips.co.uk

- ✓ Good viewing angles; sleek styling
- ✗ Reddish hue; feels a bit cheap

VIEWSONIC VX1940w

★★★★★

£154 inc VAT
From www.morecomputers.com



ViewSonic's VX1940w is the most expensive 19in screen in the group, but it has easily the best image quality of the four 19in displays. Its colours are the most natural, with no sign of any colour tints in our greyscale tests, and it displayed no banding in our colour and greyscale transition tests.

The 2ms grey-to-grey response time makes for smooth motion in both videos and games. Its biggest strength is its 1,680x1,050 resolution, which usually found only on 20in monitors. This means you have loads of space on your desktop, but you'll need a powerful graphics card to play games at this resolution. Image quality is generally very good, but colours are a little washed out and the backlight bleeds slightly at the bottom.

ViewSonic's VX1940w is an attractive display with good image quality, and its high resolution is a bonus. It seems expensive compared with the 20in widescreen models, however, which have the same high resolution but more space in which to display it.

19in WIDESCREEN LCD 1,680x1,050 native resolution, VGA, DVI inputs
PART CODE VX1940w
DETAILS www.viewsonic.co.uk

- ✓ High resolution; natural colour
- ✗ 20in displays are cheaper

NEC MultiSync LCD2070NX

★★★★★

£300 inc VAT
From www.ebuyer.com



Of the two standard-aspect 20in monitors here, NEC's LCD2070NX is far cheaper than LaCie's £686 320, but it's still priced at £300. Its standard aspect ratio and 1,600x1,200 resolution mean there's plenty of horizontal and vertical room on the desktop for serious design work.

It's a fine monitor. Setting it up required barely any changes to the default settings, and our tests showed a fantastically bright white and a very dark black level, despite the screen's relatively low 250cd/m² brightness and 700:1 contrast ratio. There were no colour tints in our greyscale tests, and we saw no banding in our gradient tests. Test photos were vivid and sharp, with lots of fine detail.

With two USB2 ports on the side and two more on the back, as well as a stand that does everything but pivot, it's a practical monitor. The LCD2070NX isn't as impressive as LaCie's 302, but it's less than half the price and ideal for serious image editors with less money.

20in LCD 1,600x1,200 native resolution, VGA, DVI inputs, four-port USB2 hub
PART CODE 60001554
DETAILS www.nec-display-solutions.co.uk

- ✓ Natural colours; good contrast
- ✗ Expensive

LACIE 320

★★★★★

£686 inc VAT
From www.it247.com



Art and design professionals will pay a huge premium for a monitor that can accurately reproduce the colours in their work. LaCie's 320 costs nearly £700, but for that you get an absolutely stunning piece of kit.

Other than basic brightness and contrast, the menu is free of adjustment options. Instead, the 320 comes with its own 'blue eye Pro' colour calibration device. Simply install the software, plug it in and hang it over a designated area on the screen, and it will sense the patterns on the screen and alter its settings to match your chosen colour profile.

It worked wonderfully well in our tests, giving perfectly natural tones. Greys showed no colour tints, and minor variations in shade were clearly distinguishable from each other. Its slow response time means it's not a monitor for video, but our photos looked beautifully real, and tiny details could be seen in even the darkest areas. The stand can also be adjusted in every direction you could want.

LaCie's 320 may be over the top for most people, but for those who work with images for a living it's a fantastic, if expensive, choice.

20in LCD 1,600x1,200 native resolution, VGA input
PART CODE 130734 DETAILS www.lacie.com

- ✓ Supplied colour calibrator; flexible stand
- ✗ Extremely expensive

LG Flatron L204WS

★★★★★

£126 inc VAT

From www.morecomputers.com

The L204WS is the cheapest of the 20in widescreen models and costs less than most of the 19in displays, so we weren't expecting much. It has only an analogue VGA connection and very few extra features, but it was clear during our tests that this display is far better than its price suggests.

We had to lower the contrast from the factory level, which was difficult with the rear-mounted buttons, and the monitor suffers from muddy dark tones. It's miles ahead of the other 20in models for colour and sharpness, though, and its colours have a vibrancy lacking in the others. Its dynamic contrast function works well, adjusting its contrast depending on the brightness of the scene up to 5,000:1.

The picture presets are terrible, but if you stick with the normal mode you'll be delighted with the quality. If you can't stretch to a 22in screen, this beats all but ViewSonic's more expensive VX1940w for image quality, and all the 19in and 20in screens for value.

20in WIDESCREEN LCD 1,680x1,050 native resolution, VGA input

PART CODE L204WS-SF DETAILS www.lge.com

✓ Vibrant colours; excellent value

✗ Slightly muddy blacks

ASUS VW202s

★★★★★

£143 inc VAT

From www.yoyotech.co.uk

Asus's VW202s is easily the most stylish of the 20in monitors, and its image quality belies its price. The screen needed some initial setup, but thankfully the buttons are clearly labelled and easy to access on the front of the monitor. The menu is one of the most comprehensive we've seen, with all sorts of preset modes to try out.

The monitor has only analogue inputs, but that didn't seem to hinder it in our tests. We noted a very slight amount of light bleeding through at the bottom of the panel on a black screen, and our greyscale tinting test showed a bit of a reddish hue. Our gradient tests showed smooth transitions between shades, though, and colours were vibrant.

The 5ms response time made for smooth motion in our videos and games, and the monitor displayed our test photos with a high level of detail. This is an impressive 20in screen, but its images aren't quite as vibrant and sharp as those of LG's L204WS and not as accurate as those of ViewSonic's VX1940W.

20in WIDESCREEN LCD 1,680x1,050 native resolution, VGA input, 3.5mm line-in audio input

PART CODE VW202S DETAILS www.asus.com

✓ Stylish design; vibrant colours

✗ Can't match LG's L204WS for value

IYYAMA ProLite E2003 WS-B1

★★★★★

£143 inc VAT

From www.ebuyer.com

Iiyama's newest 20in model is similar in price to Asus's and BenQ's 20in screens, but it can't match the cheaper LG model for quality. Its design is plain, with a fixed stand that only tilts, although it's the only 20in monitor with a digital DVI connection.

We had problems with the screen's image quality. Colours seemed pale and washed out compared with the more vivid output from LG's L204WS and Asus's VW202s. We changed the User colour mode to get rid of a nasty blue tinge, but we couldn't get a clean, natural tone without any colour casts, despite the clear control buttons and intuitive menu. It had no problems displaying colour transitions, though, and displayed deep blacks, even if a tiny bit of light bled through at the bottom.

This is one of the few monitors here with a headphone socket as well as a reasonable set of speakers. Image quality is below par, though.

20in WIDESCREEN LCD 1,680x1,050 native resolution, VGA, DVI inputs, 3.5mm line-in audio input

PART CODE PLE2003WS-B1 DETAILS www.iiyama.co.uk

✓ Headphone port; DVI port

✗ Plain design; fixed stand

BENQ E2000WA

★★★

£150 inc VAT

From www.ebuyer.com

BenQ's E2000WA is the most expensive of the 20in widescreen monitors, but it has the worst image quality of the four. We had to try a few different colour modes before we settled for sRGB, which was the only one that came close to a natural look.

We noticed banding in both our colour and greyscale gradient tests. This could affect how smoothly transitions between images are displayed, although we didn't notice any problems in our game and video tests. The E2000WA displays very deep blacks, but white screens had a yellow tinge and greys appeared slightly green, despite our best efforts to eliminate this ugly effect.

The onscreen menu is fairly easy to use, and although the buttons are a little out of the way on the side, they're clearly labelled on the front of the bezel. The monitor looks good, with clean lines and a backlit power button in the middle of the bottom edge, but the integrated speakers sound poor and the stand only tilts. The E2000WA's below-average image quality makes it poor value.

20in WIDESCREEN LCD 1,680x1,050 native resolution, VGA input, 3.5mm line-in audio input

PART CODE 9H.0D8LL.L8E DETAILS www.benq.co.uk

✓ Clean design

✗ Greenish greys; poor colour reproduction

AOC 2216Sa

★★★

£165 inc VAT

From www.micom.co.uk

If you're willing to stump up a considerable sum of money for a 22in monitor, choosing one without a digital connection doesn't make sense. AOC's 2216Sa has just one VGA port on the rear for an analogue connection, and it's a fairly uninspiring monitor overall.

The monitor's design is bland, and the image quality isn't much better. Colours are washed out and lack vibrancy, and the general colour tone is cold, even after extensive attempts at tweaking it in the menu. There's a fair amount of contrast, with reasonably deep blacks and bright whites, but you should avoid the dynamic contrast. Unlike the unobtrusive LG implementation, AOC's version insists on swinging the dynamic range up and down with every change of lighting in a movie. After two minutes we had a headache.

The stand is not adjustable and looks a little cheap, while the integrated speakers are average at best, giving us no real reason to recommend the 2216Sa. There are much better monitors here for those looking for a large 1,680x1,050 desktop.

22in WIDESCREEN LCD 1,680x1,050 native resolution, VGA input, 3.5mm line-in audio input

PART CODE 2216Sa DETAILS www.aoc-europe.com

✓ Inexpensive

✗ Washed-out colours; dull styling

HANNSPREE HANNSverona

★★★★★

£174 inc VAT

From www.misco.co.uk

The HANNSverona is the only 22in model here with an HDMI connection rather than the usual DVI. If your graphics card supports it, HDMI can carry audio as well as video, and the HANNSverona's integrated speakers are better than most here. You're better off using an HDMI cable than the analogue VGA port, as the control buttons on the screen's underside are hard to reach.

The monitor's glossy black chassis is reminiscent of LG's pricier L227WT, but it feels cheaper to the touch. It also shares the L227WT's oversaturated colours, which gives games and videos punch, but lends darker scenes a murky quality that makes detail hard to see. The image is sharp and clear, though, and text looks particularly good, so it's ideal for Windows applications.

The HANNSverona is good value for a 22in monitor with an HDMI connection, and its image quality is reasonable for the price. If you're after a 22in screen on a budget it's a good buy, but the LG L227WT's picture quality is far superior and worth the extra £50.

22in WIDESCREEN LCD 1,680x1,050 native resolution, VGA, HDMI inputs, 3.5mm line-in audio input

PART CODE VERONA DETAILS www.hannspree.com

✓ Vibrant colours

✗ Feels cheap; murky dark colours

22in WIDESCREEN/24in WIDESCREEN LCD MONITORS

BELINEA b.display 4_22" wide

★★★★

£220 inc VAT
From www.morecomputers.com



Belinea's new 22in LCD has one of the most infuriating onscreen menus we've seen, which makes setting it up a real pain. It took us far too long to switch to sRGB colour mode and lower the brightness to get a good picture. Once this chore was out of the way, we found the b.display a reasonable all-round monitor.

The screen has a DVI and, unusually, two VGA inputs, and its design is plain but certainly not ugly. The fat stand tilts, swivels and lifts through more than 10cm to suit any height, plus it pivots to portrait mode. The integrated 1W speakers may be useful for checking out YouTube videos, but they're not good enough for movies or games.

The screen's performance in our tests was varied. We were impressed by its smooth gradients and natural colours, but the high brightness comes at the cost of greyish blacks and a slightly washed-out appearance. This problem isn't enough to make it a bad monitor, but LG's superior L227WT costs just £1 more.

22in WIDESCREEN LCD 1,680x1,050 native resolution, VGA, DVI inputs, 3.5mm line-in audio input
PART CODE B.DISPLAY4.1_22 DETAILS www.belinea.com

- ✓ Excellent stand; bright
- ✗ Awful menu; greyish blacks

LG Flatron L227WT

★★★★★

£221 inc VAT
From www.lambda-tek.com/componentshop



LG's L227WT is the most expensive 22in monitor here, but it also has the best image quality and is the best-looking. It displays bright, saturated images that the other 22in screens just can't match, so is an excellent choice for games and movies. It doesn't have any integrated speakers, however.

We immediately noticed how blindingly bright the L227WT's backlight is. This gives whites a real impact, and it uses the same dynamic contrast up to 5,000:1 as the 20in model to add depth to blacks in dark scenes. The preset modes are not really worth using and we noticed banding in our greyscale gradient test, but there was no evidence of this in our photo, video or game tests.

The L227WT's brightness and vivid colours won't suit office work, but they're perfect for entertainment applications. It's relatively expensive, but it's an excellent 22in monitor and wins a Best Buy award.

22in WIDESCREEN LCD 1,680x1,050 native resolution, VGA, DVI inputs
PART CODE L227WT DETAILS www.lge.com

- ✓ Vivid colours; very bright; stylish
- ✗ Fairly expensive

Iiyama ProLite E2403WS-B1

★★★★

£257 inc VAT
From www.morecomputers.com



Incredibly, this 24in widescreen monitor is almost £200 cheaper than its nearest 24in rival in the group. It has inferior image quality to the other 24in models, but shares the same huge 1,900x1,200 pixel resolution, so it is ideal for those who have to deal with large spreadsheets and documents.

The ProLite is nowhere near as bright as ViewSonic's VX2435wm and appeared quite dim in our tests. Its colours lack punch, and the overall tone is cold and bluish. This affected our enjoyment of test games and videos. Greens appeared slightly blue, yellows appeared greenish and dark scenes were too murky.

This monitor doesn't have an adjustable stand, but we're willing to forgive this in such a cheap screen. If you like to watch movies and play games on your monitor then you're far better off with LG's 22in L227WT. Still, Iiyama's ProLite E2403WS-B1 will give you a huge screen and resolution at a low price.

24in WIDESCREEN LCD 1,920x1,200 native resolution, VGA, HDMI inputs, 3.5mm line-in audio input
PART CODE PLE2403WS-B1 DETAILS www.iiyama.co.uk

- ✓ Incredible price
- ✗ No stand adjustment; dim backlight; inaccurate colours

VIEWSONIC VX2435wm

★★★★★

£455 inc VAT
From www.pcwb.com



We have both ridiculously cheap and ludicrously expensive 24in displays in this round-up. ViewSonic's VX2435wm is the perfect compromise. It's stylishly glossy, with a black and silver design, and it has one of the best sets of integrated speakers here.

Removing the large rear panel reveals a staggering array of connections. HDMI, VGA, component, composite and S-video all sit on either side of the central column. Once the rear panel is back on, it acts as a great cable-tidy.

The screen needed little setting up, with very bright images out of the box and a more natural colour tone than any screen here apart from Samsung's pricier 245T. Our gradient tests showed smooth colour transitions, while games and photos showed tremendous detail. The only drawback is the blacks, which aren't the deepest in the group.

This monitor may seem pricy, but it is far superior to Iiyama's E2403WS-B1. If you want a huge desktop and great image quality, the VX2435wm is ideal. It's a Best Buy.

24in WIDESCREEN LCD 1,920x1,200 native resolution, VGA, composite video, S-video, HDMI, component video inputs, 3.5mm line-in audio input
PART CODE VX2435WM DETAILS www.viewsonic.co.uk

- ✓ Bright backlight; accurate images, plenty of connections
- ✗ Blacks could be deeper

LG Flatron L245WP

★★★★★

£484 inc VAT
From www.pcwb.com



While impressive, LG's 24in L245WP just misses out on an award. It's a similar price to ViewSonic's VX2435wm, but a side-by-side comparison shows that it can't compete for brightness. It's nowhere near as dim as Iiyama's 24in screen, but its colours lack vibrancy.

You should connect the screen to your PC using its digital HDMI port, as setting up the analogue connection with the monitor's awkward menu system is difficult. Image quality is good, and the Windows desktop was extremely clear and sharp. Our test photos showed tremendous detail, although the darkest greys tended to blend into each other, which made for slightly murky shadows.

This Flatron has some advantages over ViewSonic's 24in monitor. The stand is fully adjustable, and there's a two-port USB hub just behind the left edge of the screen. The screen has no integrated speakers, though.

LG's Flatron L245WP is a good all-round monitor, but ViewSonic's VX2435wm is cheaper and has better image quality.

24in WIDESCREEN LCD 1,920x1,200 native resolution, VGA, HDMI, component video inputs, two-port USB2 hub
PART CODE L245WP DETAILS www.lge.com

- ✓ Good image quality; USB hub; adjustable stand
- ✗ Dark areas can be murky

SAMSUNG SyncMaster 245T

★★★★★

£709 inc VAT
From www.laptopsdirect.co.uk



Samsung's 245T costs a huge £709, but it is a truly outstanding monitor. Lining it up next to the other 24in

models shows off its vivid colours, wonderfully bright backlight and superb contrast. Playing Crysis on this screen is exhilarating, such is the vibrancy it brings to the jungles of the game.

It has a wide range of connectors, including HDMI, DVI, component and composite, and the best onscreen menu we've seen, with a range of ways to tweak an image. The screen's Motion Picture Acceleration mode is meant to make fast motion smoother, but we did notice some minor blurring in fast panning scenes. This is the monitor's only weakness, though.

There's a four-port USB hub for your peripherals, and the stand is fully adjustable and can pivot 90° to go into portrait mode. Samsung's SyncMaster 245T is extremely expensive compared to the other 24in screens here, but it has the best image quality of any screen here. It's our Most Wanted.

24in WIDESCREEN LCD 1,920x1,200 native resolution, VGA, DVI, composite video, S-video, HDMI, component video inputs, four-port USB2 hub
PART CODE LS24HUCEBQ DETAILS www.samsung.co.uk

- ✓ Gorgeous colours; adjustable stand; excellent contrast
- ✗ Slight blurring in fast scenes; ludicrously expensive

19in
WIDESCREEN

20in 4:3

20in WIDESCREEN



MANUFACTURER	HANNSG	BELINEA	PHILIPS	VIEWSONIC	NEC	LACIE	LG	ASUS	IYYAMA
Model	HW194D	o.display 1.19" wide	190CW8FB	VX1940w	MultiSync LCD2070NX	320	Flatron L204WS	VW202s	ProLite E2003WS-B1
Rating	★★★	★★	★★★	★★★★	★★★★	★★★★	★★★★★	★★★★	★★★
PHYSICAL									
Shape and size	19in widescreen	19in widescreen	19in widescreen	19in widescreen	20in	20in	20in widescreen	20in widescreen	20in widescreen
Pixel pitch	0.283mm	0.285mm	0.285mm	0.243mm	0.255mm	0.255mm	0.258mm	0.258mm	0.258mm
Native resolution	1,440x900	1,440x900	1,440x900	1,680x1,050	1,600x1,200	1,600x1,200	1,680x1,050	1,680x1,050	1,680x1,050
Contrast ratio	700:1	1,000:1	1,000:1	1,000:1	700:1	700:1	5,000:1	2,000:1	1,000:1
Brightness	300cd/m²	400cd/m²	300cd/m²	300cd/m²	250cd/m²	280cd/m²	300cd/m²	300cd/m²	300cd/m²
Horizontal viewing angle	150°	170°	160°	170°	176°	178°	170°	160°	170°
Response time	5ms grey-to-grey	5ms grey-to-grey	2ms grey-to-grey	2ms grey-to-grey	16ms black-to-black	16ms black-to-black	5ms black-to-black	5ms grey-to-grey	2ms grey-to-grey
Base (WxD)	260x235mm	197x15mm	228x182mm	196x196mm	215x215mm	270x230mm	230x230mm	210x210mm	215x190mm
Screen elevation	128-244mm	100mm	97mm	117mm	60-170mm	90-240mm	100mm	100mm	110mm
FEATURES									
Portrait mode	Yes	No	No	No	No	Yes	No	No	No
Wall-mount option	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Height adjustable	Yes	No	No	No	Yes	Yes	No	No	No
Integrated speakers	Yes (1W)	Yes (1W)	No	No	No	No	No	Yes (1W)	Yes (1W)
Detachable cables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB hub	No	No	One-port USB2	No	Four-port USB2	No	No	No	No
Integrated power supply	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kensington lock lug	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extras	No	No	SmartAccessory pack	No	No	No	No	No	No
Video inputs	VGA, DVI	VGA	VGA	VGA, DVI	VGA, DVI	VGA	VGA	VGA	VGA, DVI
Audio inputs	3.5mm line-in	3.5mm line-in	No	No	No	No	No	3.5mm line-in	3.5mm line-in
ENVIRONMENTAL									
Normal consumption	55W	34W	36W	44W	66W	50W	45W	49W	49W
Standby consumption	1W	1W	1W	1W	1W	1W	2W	2W	2W
TCO	TCO 03	TCO 03	TCO 06	TCO 03	TCO 03	TCO 03	TCO 03	TCO 03	TCO 03
BUYING INFORMATION									
Price including VAT	£120	£126	£137	£154	£300	£686	£126	£143	£143
Supplier	www.morecomputers.com	www.oyyy.co.uk	www.ebuyer.com	www.morecomputers.com	www.ebuyer.com	www.it247.com	www.morecomputers.com	www.yoyotech.co.uk	www.ebuyer.com
Details	www.hannsg.co.uk	www.belinea.com	www.philips.co.uk	www.viewsonic.co.uk	www.nec-display-solutions.co.uk	www.lacie.com	www.lge.com	www.asus.com	www.iyama.co.uk
Warranty	Three years onsite	Three years onsite	Three years onsite	Two years RTB	Three years onsite	Three years RTB	Three years onsite	Three years RTB	Three years onsite
Part code	HW194D	0.DISPLAY1.1_19	190CW8FB/05	VX1940w	60001554	130734	L204WS-SF	VW202S	PLE2003WS-B1

20in
WIDESCREEN

22in
WIDESCREEN

24in
WIDESCREEN



MANUFACTURER	BENQ	AOC	HANNSPREE	BELINEA	LG	IYYAMA	VIEWSONIC	LG	SAMSUNG
Model	E2000WA	2216Sa	HANNSverona	b.display 4.22" wide	Flatron L227WT	ProLite E2403WS-B1	VX2435wm	Flatron L245WP	SyncMaster 245T
Rating	★★	★★	★★★★	★★★★	★★★★★	★★★	★★★★★	★★★★	★★★★
PHYSICAL									
Shape and size	20in widescreen	22in widescreen	22in widescreen	22in widescreen	22in widescreen	24in widescreen	24in widescreen	24in widescreen	24in widescreen
Pixel pitch	0.258mm	0.282mm	0.282mm	0.282mm	0.282mm	0.270mm	0.269mm	0.270mm	0.270mm
Native resolution	1,680x1,050	1,680x1,050	1,680x1,050	1,680x1,050	1,680x1,050	1,920x1,200	1,920x1,200	1,920x1,200	1,920x1,200
Contrast ratio	1,000:1	2,000:1	1,000:1	900:1	5,000:1	1,000:1	1,000:1	1,000:1	1,000:1
Brightness	300cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	300cd/m²	500cd/m²	500cd/m²	300cd/m²
Horizontal viewing angle	160°	170°	170°	170°	170°	178°	176°	178°	178°
Response time	5ms grey-to-grey	5ms black-to-black	5ms black-to-black	5ms black-to-black	2ms grey-to-grey	2ms grey-to-grey	8ms grey-to-grey	8ms black-to-black	6ms black-to-black
Base (WxD)	265x170mm	203x210mm	280x215mm	300x230mm	230x230mm	250x195mm	330x245mm	270x270mm	250x250mm
Screen elevation	130mm	100mm	92mm	80-190mm	115mm	110mm	162mm	105-220mm	105-205mm
FEATURES									
Portrait mode	No	No	No	Yes	No	No	No	Yes	Yes
Wall-mount option	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Height adjustable	No	No	No	Yes	No	No	No	Yes	Yes
Integrated speakers	Yes (1W)	Yes (2W)	Yes (2W)	Yes (1W)	No	Yes (2W)	Yes (3W)	No	No
Detachable cables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB hub	No	No	No	No	No	No	No	Two-port USB2	Four-port USB2
Integrated power supply	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kensington lock lug	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extras	No	No	No	No	No	No	No	No	No
Video inputs	VGA	VGA	VGA, HDMI	VGA, DVI	VGA, DVI	VGA, HDMI	VGA, composite video, S-video, HDMI, component video	VGA, HDMI, component video	VGA, DVI, composite video, S-video, HDMI, component video
Audio inputs	3.5mm line-in	3.5mm line-in	3.5mm line-in	3.5mm line-in	No	3.5mm line-in	3.5mm line-in	No	No
ENVIRONMENTAL									
Normal consumption	48W	49W	55W	38W	45W	65W	90W	85W	130W
Suspend consumption	1W	1W	1W	1W	1W	2W	1W	3W	2W
TCO	TCO 03	TCO 03	Not disclosed	TCO 03	Not disclosed	TCO 03	Not disclosed	TCO 99	TCO 03
BUYING INFORMATION									
Price including VAT	£150	£165	£174	£220	£221	£257	£455	£484	£709
Supplier	www.ebuyer.com	www.micom.co.uk	www.misco.co.uk	www.morecomputers.com	www.lambda-tek.com/componentshop	www.morecomputers.com	www.pcbwb.com	www.pcbwb.com	www.laptopsdirect.co.uk
Details	www.benq.co.uk	www.aoc-europe.com	www.hannspree.com	www.belinea.com	www.lge.com	www.iyama.co.uk	www.viewsonic.co.uk	www.lge.com	www.samsung.co.uk
Warranty	Three years onsite	Three years RTB	Three years onsite	Three years onsite	Three years onsite	Three years onsite	Two years RTB	Three years onsite	Three years RTB
Part code	9H.0DBLL8E	2216Sa	VERONA	B.DISPLAY4.1_22	L227WT	PLE2403WS-B1	VX2435WM	L245WP	LS24HUCEBQ

Labs verdict LCD monitors

Two things struck us about this *Labs* – how little you have to spend to get a large LCD monitor, and how much variation in quality there is between the different screens. In the end, though, four displays stood out.

For those just looking for an affordable, high-quality monitor, LG's Flatron L204WS is streets ahead of the competition. This 20in model costs less than most of the 19in

screens, yet it has a vibrant picture and impressive contrast. It only has an analogue connection, but if you can't stretch to the price of a 22in screen it's the monitor to buy.

If your wallet can handle it, though, a 24in screen's huge desktop area will increase your productivity. Samsung's 245T is ludicrously expensive, but its near-flawless picture quality and stylish design make it our Most Wanted

monitor. However, our Best Buy 24in screen is ViewSonic's VX2435wm, with its natural colour reproduction and reasonable price.

If you cannot stretch to a 24in screen, then LG's Flatron L227WT is the ideal compromise. It's the most expensive 22in screen here, but its superb picture quality and vibrant colours make it a pleasure to use. It's a Best Buy. **CS**

20in WIDESCREEN LCD MONITORS

LG Flatron L204WS
★★★★★

22in WIDESCREEN LCD MONITORS

LG Flatron L227WT
★★★★★

24in WIDESCREEN LCD MONITORS

VIEWSONIC VX2435wm
★★★★★

SAMSUNG SyncMaster 245T
★★★★